

REMARKS

Claims 1-20 are pending in the present application. Applicants respectfully request re-examination and reconsideration of claims 1-20.

In the outstanding Official Action, claims 1-5, 7, 10-16, and 20 were rejected under 35 USC §103(a) as allegedly being unpatentable over DAMHUS et al. This rejection is respectfully traversed.

Applicants believe that DAMHUS et al. fail to disclose or suggest the claimed invention. Applicants believe that DAMHUS et al. fail to teach a method of activating bleach, comprising the step of combining with the bleach a partially acylated fructan having a degree of substitution with acyl groups of 0.4-2.5 and a degree of substitution of less than 0.5 with other substituents. The DAMHUS et al. publication is directed to distinct sugar derivatives for use as bleach activators. The sugar derivatives disclosed by DAMHUS et al. are acylated monosaccharides, containing a single sugar moiety (hexose or pentose).

This stands in contrast to the present invention. The present invention is directed to derivatives of oligo- and polysaccharides having a minimum chain length of three saccharide units (see page 2, lines 2-3). Thus, while the Examiner contends that the acylated fructans are encompassed by the broad teachings

of DAMHUS et al., DAMHUS et al. fail to disclose or suggest anything beyond an acylated monosaccharide. Indeed, the actual publication is limited to glucose derivatives (see Column 3, lines 58-62 and the examples).

Applicants also note that the derivatives disclosed by the DAMHUS et al. publication should contain at least one long-chain acyl group having seven carbon atoms. The compounds of the present invention are effective with the presence of only one simple, short-chain acyl group such as acetyl and propionyl.

Applicants believe that the DAMHUS et al. fails to provide one of ordinary skill in the art any motivation or suggestion to search for bleach activators starting from oligo- or polysaccharides, especially fructans. As a result, Applicants believe that DAMHUS et al. fails to anticipate or render obvious the claimed invention.

Claims 1-5, 7-16 and 20 were rejected under 35 USC §103(a) as allegedly being unpatentable over KUNZ et al. 5,968,886. This rejection is respectfully traversed.

Applicants believe that the derivatives disclosed by KUNZ et al. are distinct from those of the claimed invention. The sugars disclosed by KUNZ et al. are limited to monosaccharide and disaccharides.

Moreover, the sugars of KUNZ et al. are sugar acids.

However, the publication does not disclose or suggest the utilization of oligo fructosides or fructans. These sugar acids contain at least one carboxyl group per sugar (see column 2, lines 2-3). The sugars of the claimed invention are purely acyl derivative that contain little or no other functional groups. Indeed, the Examiner's attention is respectfully directed to claim 1 wherein it is stated that the degree of substitution for other substituents other than acyl is less than 0.5.

Thus, it is believed that the publication of KUNZ et al. fails to render obvious the claimed invention.

In the outstanding Official Action, claim 10 was rejected under 35 USC §102(b) as allegedly being anticipated by or, in the alternative, under 35 USC §103(a) as allegedly obvious over EHRHARDT et al. 6,063,752. This rejection is respectfully traversed.

Applicants believe that EHRHARDT et al. fail to anticipate or render obvious the claimed invention. Applicants believe that EHRHARDT et al. fail to disclose acetylated or propionylated fructans having a solubility as set forth in claim 10.

While the Official Action also contends that it would have been obvious to one of ordinary skill in the art to arrive at a partially acetylated fructan having the claimed solubility,

Applicants note that EHRHARDT et al. do not provide any suggestion as to optimizing any of the parameters in a manner to obtain the claimed invention. Indeed, Applicants believe that the Official Action fails to meet its burden in showing that the claimed invention has been rendered obvious.

Claims 8 and 9 were rejected under 35 USC §103(a) as allegedly being unpatentable over EHRHARDT et al. This rejection is respectfully traversed.

Indeed, as noted above, EHRHARDT et al. fail to disclose or suggest a process of producing an acetylated and/or propionylated fructan or fructan derivative thereof with a reactive acyl derivative of acetic and/or propionic acid, wherein the acylation is carried out in an aqueous medium at a pH of between 7 and 9.

Moreover, the Examiner's attention is respectfully directed to current Example 9 and comparative Example D. Applicants believe that these examples demonstrate the differences between the claimed method and the method disclosed by EHRHARDT et al. By following each method, one of ordinary skill in the art would reach completely different outcomes.

Claims 1-7, 11 and 20 were rejected under 35 USC §103(a) as allegedly being unpatentable over EHRHARDT et al. in view of DAMHUS et al. This rejection is respectfully traversed.

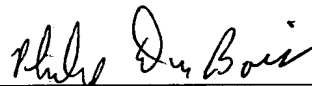
It is believed that the proposed combination of cited prior art fails to render obvious the claimed invention. Applicants believe that one of ordinary skill in the art would lack the motivation and necessary expectation of success to combine and modify the teachings of EHRHARDT et al. and DAMHUS et al. to obtain the claimed invention. Indeed, it is only with hindsight knowledge that one would combine the teachings of DAMHUS et al. (the use of distinct sugar derivatives as bleach activators) with the teachings of EHRHARDT et al. (derivatives with a distinct degree of substitution and prepared by unsuitable methods), and the expectation of obtaining the claimed invention.

Thus, it is believed that this application is in condition for allowance. Allowance and passage to issue on that basis are accordingly respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,,

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